

Aquila Resources Inc-Back Forty Project, NPDES Permit No. MI0059945

Summary of comments received during the public notice period and at the Public Hearing (relating to the NPDES permit) and bolded responses.

1. Comment: The State of Michigan does not have the authority to issue a permit at the proposed site based on long standing boundary disputes between Wisconsin and Michigan.
2. Comment: The ordinary high water mark would not allow Michigan to regulate discharges other than at those times the ordinary high water mark has been met and or exceeded.
3. Comment: Due to the proximity of the facility to the Menominee River, rain events will result in more discharges than what's being authorized through Outfall 001 in the draft permit.
4. Comment: The DEQ has omitted important facts regarding the composition of the ore deposit in question. Volcanic Massive Sulfide (VMS) is not similar to other type of ore typically mined in Michigan and carries unique and significant environmental issues.
5. Comment: The DEQ report does not factor in all the possible chemical reactions that take place through the ground which in essence discharges into the Menominee River.
6. Comment: The antidegradation demonstration is not adequate and noncompliant with Rule 1098. The DEQ has conducted no economic impact study relating to this permit. The applicant did not include the negative impacts of a mine. Any new jobs that will be created by the mine will be mostly filled by workers from outside the local communities. Consideration of adverse impacts to residents in the vicinity of the mine such as the potential decrease in property values, increase in crime, drug addiction, and domestic violence. The potential need for a new road and the subsequent cost to the taxpayers.
7. Comment: The discharge authorization of 1.52 million gallons per day in the permit will deplete the groundwater level in the vicinity of the mine.
8. Comment: The proposed discharge will pollute the Menominee River which is a source of drinking water for many people and wildlife.
9. Comment: How and who determines the need for an optional pretreatment for the leachate from the oxide tailings and waste rock management facility?
10. Comment: Please explain under what circumstances, and how often, the facility would be allowed to make such discharge, what DEQ's criteria would be for making a determination that the discharge was necessary, and how it would be determined that any such discharge are below the limits set in 40 CFR §440.104(a)?
11. Comment: Given the proximity of the proposed facility to the Menominee and Shakey Rivers, the floodplain, and regulated wetlands, it is only prudent that the Contact Water Basins should be designed for a 500-year storm event instead of a 100-year, 24-hour storm event.
12. Comment: The Storm Water Pollution Prevention Plan and Pollution Incident Prevention Plan are not available for the public to review and comment.
13. Comment: The use of sulfuric acid or sodium hydroxide are proposed to be used if necessary to adjust the PH prior to discharge. Have other alternatives been considered as these are highly toxic to aquatic life?

14. Comment: Waivers for Biochemical Oxygen Demand-5 and Chemical Oxygen Demand have been requested in the application. Please explain why they are not expected and whether DEQ will grant the waivers, and on what basis.
15. Comment: The proposed mine will increase traffic, noise, and other nuisance in the area.
16. Comment: The applications appear to contain inconsistent information. The information submitted in the application should be verified by a separate company and the permit monitoring should also be done by an independent company.
17. Lowering water quality of the receiving waters should not be allowed in order for the proposed mine to operate.
18. Comment: The NPDES permit should be denied based on the incomplete testing of the water as well as the lack of quantitative analysis in regard to macroinvertebrate periphyton, riparian, macroinvertebrate and aquatic macrophytes and algae sampling.
19. Comment: The mine will have adverse impacts on the endangered animals like the northern long eared bat, the endangered species like the Lake Sturgeon, and wild rice.
20. Comment: Issuing the NPDES permit is premature because the DNR land swap has not occurred and the wetland permit application is still pending.
21. Comment: The NPDES permit should address the concerns with arsenic and sulfate.
22. Comment: Why has there not been a direct review of the permits by USEPA, USACE, and USFWS?
23. Comment: Will optimization of the facility during operation require additional public notice and comment period?
24. Comment: Please provide the location of the offsite solids disposal facility and waste characterization information for the solids.
25. Comment: There are conflicting statements in the descriptions of certified operators in the application. Please clarify how many operators will be employed and provide proper reference to the actual MDEQ or other Michigan rules that regulate Industrial Operators.
26. Comment: Effluent monitoring should be conducted at the outfall and not somewhere within the discharge line. There is no mention of surface water monitoring in the river. There are no references to a mixing zone or plans for sampling at mixing zone location. Will Wisconsin Department of Natural Resources be part of the monitoring plan since the adjacent water is within the WDNR jurisdiction?
27. Comment: Explain why this permit does not mention the oxidative states of contaminants, and what the impacts on micro and macroinvertebrates, mussels, snails, sturgeon and bass will be. Will effluent testing to determine which oxidation state (arsenic and antimony speciation) is present in the effluent?
28. Comment: Iron should be monitored in the effluent. How will iron be removed during wastewater treatment?
29. Comment: Manganese limits should be lowered. Mussels are sensitive to trace metals such as manganese.
30. Comment: The NPDES permit outlines these startling daily allowances: arsenic – 8.6 lbs/day, cadmium – 0.27 lbs/day, copper – 0.58 lbs/day, fluoride – 210 lbs/day, lead – 7.6 lbs/day, nickel – 15 lbs/day, selenium – 1.5 lbs/day, and zinc – 7 lbs/day.

31. Comment: Menominee County passed a resolution banning the use of cyanide within its boundaries – which includes the Aquila Back Forty project site. Explain, why does this permit assume that cyanide leach process is still presumed allowable.
32. Comment: Heavy metals and other mine-effluent pollutants that will be released into the environment by Aquila's Back Forty facilities pose an imminent and substantial threat to health and habitat of state-listed native mussels.
33. Comment: Will mussel relocation plan follow federal guidance and will it be successful?
34. Comment: Thermal limits protective of freshwater mussels should be set in the permit.
35. Comment: Explain how this permit's mercury limit is protective of the environment, given the existing impairment.
36. Comment: NPDES permit should require sediment monitoring.
37. Comment: The EPA now recommends developing species-specific Ammonia guidelines. Why this permit did not include site-specific, species-specific ammonia limits, protective of freshwater mussels?
38. Comment: What is the final destination or disposal method/site for the "sludge/other mine waste" authorized by the permit? Where is the Company intending to send WTP waste material, and how will be stored on the site?
39. Comment: Tighter limits should be set for heavy metals, ammonia, and other pollutants to protect sturgeon, smallmouth bass, and mussels.
40. Comment: The mine's location being extremely close to the river, I find it difficult to believe there will not be any negative effects on the river as a result of these operations.
41. Comment: In almost every instance of sulfide mining across the country, accidents have happened and water quality has suffered.
42. Comment: The flood maps being used are outdated, the climate warming is resulting in massive increase in rain storm totals. There are four upstream dams built over 70 years ago whose failure of one would result in massive downstream flooding.
43. Comment: In allowing mining in this area, how can you justify destroying our recreational area and our waters just for your own greed. I will not bestow the words on you that ran through my mind. I believe God will prevail.
44. Comment: Because 1) Wisconsin has concurrent jurisdiction over the Menominee River, 2) the Menominee River is, under a plain reading of the law, part of Aquila's proposed mine site, and 3) Wisconsin law requires a permit for non-ferrous mining sites in the state, therefore Aquila's permits should be denied and the company denied the ability to begin its proposed open pit mine construction until it can show that it can also meet Wisconsin's regulations concerning non-ferrous mining.